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Research Article

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Is Time a Physical Unit?

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Abstract

The article approaches the epistemological question on the concept of time from an anthropological psychology perspective. The differentiation between imminent perceptions and existence beyond imminent perception has been the earliest conceptualization of time found so far in the traces of human civilizations. The research differentiated psychological time from modern physics and astronomy as the basic hypothesis in the inquiries on the concept of time in physics and modern astronomy – is the physical unit of time an ontological existence of things or an inter-subjective concept? The research adopts transcendental philosophy in the questioning of unconsciousness in the sociology of knowledge with a dissection between psychological time and physical units of time. With further questioning into the physics of time, and the nonphysical nature of time, I second with the primordial graviton background's pragmatic approach, despite of the falsifiability of the Big Bang theory and inflation.

Keywords: Arrows of time; graviton; humanitarianism; singularity; thermodynamics; time.

Introduction

Figure 1: The early documentation of temporal perception of time from imminent perceptions (Unknown, 12978 B.C.) [1]

C paintings have been the earliest documentations on the concept of time in human civilization. The Lascaux cave paintings in fig. 1 and 2 [1] set a stark contrast on the conception of time from an anthropological notion of psychology. The imminent perceptions of bio-temporal movements could have led to the earliest conceptualization of time in humanity seen in fig. 1, and the development of sequential abstractions seen in fig. 2. Even though it can be inferred that the development of sequential notions of time were still bound by the periphery of human activities in specific location and position, the development from an internal bio-psycho-temporal notion of time to a cognition on a notion of time beyond the activities in biological needs seen in fig. 2, can be said to be the earliest development of calculus in human civilization. Even though unclear in the evidence which proceeded the other from the differentiation between the recorded food resources and the abstract figures of time passing; the notion of time, however was recorded, existed only within the periphery of living and activity. The Lascaux cave paintings suggest that mathematical tools do not necessarily imply the objectivity on the concept of time.

Figure 2: The early documentation on the rationalization of time

exterior to temporal perceptions (Unknown, 12978 B.C.) [1]

It can be seen in fig. 2 that the quantification method in mathematics has been used for sustaining power in human groups since the tribal cultures in satisfying and maximizing lower needs in the Maslow's Hierarchy of Needs theoretical framework, with consequences of conflicts & wars throughout human history. Nonetheless, the development of mathematical concept away from lower needs can still been found in the ancient cave paintings, which gradually developed into scientific methods in modern & contemporary cultures. The psychological notions of time in modern sciences are often categorized in the humanities or some overlaps with the social sciences. The two distinctions are often categorized into subject and objective epistemology [2].

Later ancient cultures adopted the epistemology of time by the psychological projection on the spheres of activities from the sun, the moon, to the celestial bodies typically of stars, with documented mythologies and observational techniques. The initial categorization, i.e., the primary category of physics, can thus be said to be an analogous technique used to derive the unperceived realities with perceivable principles of imminent realities. Even though the imminent perceptions of time through bio-temporal movements are not usually accepted by scientists with objective epistemology, the abstractions in conceptualization in sequential perceptions are no different from one to the other.
Modern and contemporary definitions of time have extended new forms of power, i.e. technologies, and the elimination of psychological extensions of power is no less difficult than in the ancient constructs [3]. The singularities are defined by proton decay momenta at 90º in angular distribution with electromagnetic engineering [4] and the SI definition of time [5], while problematic bio-temporal social disruptions on the psychological time still exist with methods of torture in social engineering controls [6,7]. The article adopts an anthropological psychoanalysis framework for defence mechanism in eliminating extension transference [8] explained by the psychopathological dynamics behind cyberwarfare intrusions, along with the epistemological questions on the concept of time in scientific communications of the epistemic limitations in the correspondence theory of truth [9].

Methodology

What modern astronomy has changed started from the objectification of imminent perceptions of subjective projections of time as a physical phenomenon caused by the celestial bodies, started from the change of geometric expressions by the Copernicus revolution, differentiated from cultural calendar systems such as the churches that take the pragmatic projections of time as a physical phenomenon to the arrangements of society with subjective bio-psychological dominance. This is where differentiating psychological time from the phenomenological physical units of time [10] can be precursory. From the measurements of time in various historic and modern derivatives, constituents of matter and physical laws have been the standards of units on the concept of time. This inevitably introduced en- tropy into the measurements of time and the conscious experiences of time if anyone takes the reference – without which can one claim to be objective with the concept of time?

[11] approached the dilemma with the synchronization of the standardized tools of time, clocks, in theorizing special relativity. From the ancient cave paintings to the minimalist entropic automatons of time-keeping in scales, dependence on medium is characteristic of the correspondence theory of truth [9] with the geometric epistemology of the celestial dome. With computer graphics, [12] subtly portrayed such epistemology plotted against the "center" of time of the earth dwellers' consciousness. Between [11] and Newton, the concept of time shifted from the notions of distance in space to the notions of natural decay with distance. The collective unconsciousness thereon, has been the inevitable arising of physical and space-time singularities [13]. Even though the geometrical and mathematical dimensions have changed vastly in modern and contemporary astronomical sciences, the biological, mechanical, and physical limitations of sequential perceptions on the concept of time becomes of the fundamental question.

A. The Unconscious Origins on the Sequential Perception of Time

Does time exist without measuring? If not, we deny time as an objective existence; if otherwise, what is time independent of the matter forms in reference? It is worth noting that even consciousness is not without the matter forms of human biochemistry, and it is the consciousness of life and death in its linear sequence both in the carriers of consciousness and psychosocial correspondence of anticipations, the collective unconsciousness of the conscious perceptions of unidirectional flows of time is made a social transaction consensus. An example is the SI unit definition of time with "unperturbed ground-state hyperfine transition frequency of the cesium 133 atom" [5], which is empirically signatory to the secrets of natural occurrences of life and death for many creatures. Yet if one is about to measure time intervals of frequency, the shift of conscious focus means that the measurement takes exactly the amount of time passing and the values expressed by such a measurement – or even longer if the concept of time in definition is taken reference from the solar radioactive angular rays to earth while we were measuring the decay product. It then means that the natural decays and entropic systems of the environment fundamentally deny the concept of time in its physical form to be unitary, if the concept of time were to be taken equivalent to the physical unit of time. Moreover, with the concept of time closely associated to the concept of gravity, variables of pressure fundamentally put time into an abstract entropic system even if time is not a physical concept – so, is there a "beginning" of time in the linear and sequential mathematical logos that constructed modern physics?

B. Comparable Infinities of Calculus

With the unanswered question of the physics of time, topological expressions have developed a correspondence theory of truth that developed into modern astronomical instruments. It means that the biophysical entropy of human consciousness inherited from medium that convey the passing of knowledge with further sophistication does have a pragmatic influence to the comprehensions of infinities. Quantum physics is a typical pragmatism to the physics of time while preserving the notion of time since Copernicus's heliocentric anchoring. However, such pragmatism still falls short like the SI unit of time that is confined to the matter of space, with the implication in advantage that in the SI unit, time can have its own dimensions. The question then arises

that, is the dimension of time in the morphology of general relativity, or in the linearity of special relativity?

With the SI unit definition, the arrow of time can be bidirectional in thermodynamics regarding special relativity. Albeit the Conformal Cyclic Cosmology adopted a discrete approach to the arising of negative energy, possibly for instrumentation security concerns in general relativity with aeons [14], the linearity of special relativity is not excluded in the quantum realm with the Cosmic Microwave Background (CMB) and solar distributed space-based telescopes. The CMB is arguably indifferent from the "stars" civilizations have observed till date, and the matter form projected beyond earth does not necessarily trace with the cesium 133 atom. The time construct of the Big Bang theory hence again has been trapped in a mirror universe of human biology.

With the human biological perceptions that are philosophized as epistemology, time and space are indistinguishable without the involvement of matter, and without matter, time and space are interchangeable. [15] extended the concept in time with "the continuum of displacement ... not equivalent to space ... only related to space". This blurry explanation from experience construed displacement to the continuity of psychological time that is innate and irreplaceable. In the context of special relativity, it resembles to a reference frame without a physical form. How to make the idea more comprehensible? The bases of modern computer systems are no more than a compilation from 0 to 1 ad infinitum. Either read with print on a piece of paper, or on a screen transferred from the information pipelines, the perceptions of the cave when fig. 2 was first seen, are no more than a displacement of its physical form. And all the texts so far in the document have been no more than the categorical rationale in the context of the initial perceptions. It means that the texts configured so far have been construed with displacement.

And how did we know it was calculus differed from the hams of meat seen in the cave? The inference was drawn from the paintings of the drawings representing hunting, with a row of figures symbolized by the bones attached to the imaginary meat. Some other figures' "bones" may have faded from the surface materials of the cave, but by the patterns of fading, the white paint used to symbolize the bones faded slower than the red paints. And by an epistemological induction from our biological perceptions, we differed the concept of calculus from the representations of food storage. It was an inference from our current living to the ancient existences of the tribe that we think we know one thing or two about the deceased human beings and their activities. And by mental comparisons the future ad infinitum seems comprehensible to us. And why do we believe there was meat just as how it was documented on the cave wall? Therefore, calculus is comparable and not absolute. And then, is infinity a concept as symbolic as perceived in the ancient displacement that has no redeemable values?

C. Epistemology and Truth

With its nature of social communication, the correspondence theory of truth [9] can be indeterminate in the eyes of a physicist, and the only resolution between epistemology and truth depends on the belief if truth exists independent of scientific, or more generally, human activities. If the latter, epistemology can be considered independent of ontology; but no epistemology can be known without ontology. Therefore, ontology is medium dependent and epistemology is not – a brain scientist may say otherwise. [2] stated that "epistemic reflexivity would enable researchers to reflect rationally and hold one's attention at either a methodological or meta-theoretical level". If we take it as a truth that the truth exists independently, and one of us holds the epistemological truth, the premise of scientific method and knowledge production can conflict with the concept of truth for its inevitable involvement of at least one ontological artifact. In another way, similar conflicting assertion can arise that truth is dependent on epistemology, which will deny the epistemic value of the sociology of knowledge, hence denying the values of scientific communication and knowledge production.

With generational thinking in cisgender heterosexual collective unconsciousness, ontology is often considered dependent on epistemology [16,2]. The civilization thinking in modern constructs of computation & information often makes the concept of time inevitably subjective, and topologically bounded to be subjective with the circular Copernicus model which Nietzsche expressed as "eternal return" in the "sun spirit". It is then an intuitive perception that truth is in another dimension and epistemology a displacement. As has so far been construed, the epistemology of civilization can be sequential as the precept of time; if ontology is not independent of epistemology, neither epistemological objectivity or epistemological subjectivity implies truth.

Conclusions

Newton's laws can be projected to the macro-particle descriptions of the nuclear forces, just as light is the microscopic descriptions of the moving particles [17]. It is only by the environmental interference wave-functions are created from perturbation. Just as the sun's rays only distribute on the earth's surface, time is not sequential as it appears to our bio-psychological perceptions with blood plasma constantly hitting on the grey and white matter through the neuron network. [18]'s proton decay model of the universe from the singularity on corroborated with the thermal duality on the concept of time, hence the thermal arrows of time in the navigation of the universe. The minuscule epistemological paradigm-shift on the concept of time, however unpragmatic it may be to engineering physics, hence ontology, can pave a path to the deeper truths of the universe that is not in the Big Bang cosmological model.

As [19] suggested, the neutron parities in a local black hole and white hole are signatory to the gravitational effects from irradiation and meson products. A psychological subjective epistemology from a particle physics perspective seems better suited to explore the origins of time other than an objective epistemological approach that requires heavily on laboratory physics whereby so much conditions cannot be met simulating the cosmic environment. A cosmic theater may increase the conscious levels of apprehension, but the spirit of rationality always seems to favor an objective epistemology. The studies of pulsars seem to be the only existing resolution between the subjective epistemology of the physio-chemistry concept of time, and the objective epistemology of special relativity travelling across the domains of what might be called time in the scientific consensus.

From a philosophical perspective, categorization rationale may

resolve the epistemological divergences within the methodological validity framework. The apparatus rationale of homo erectus and epistemic rationale of homo sapiens have never eluded the modern & contemporary science, with a fearful thought if the scientific consensus can be a scientifically agreed-upon collective unconsciousness. Or worse can it be that contemporary human consciousness has not surpassed anywhere further beyond the ancient epistemological traditions, with slight variations in technological salience of the apparatus rationale. And it is only by the parameters of the apparatus an objective epistemology is often said to be achieved rather than being subjective. If truth can be arrived at regardless of subjective or objective epistemology approaches, how is the concept of truth determined with the epistemology being sequential from categorization in civilization evolution?

From a location-specific tribal-centered concept of time to an individualistic space-dependent concept of time with clocks, the inter-subjectivity in the concept of time has changed drastically. With the celestial-object-dependent concept of time governing modern scientific consensus, a cosmological consciousness may disagree with what time is progressively. But is the cosmological decay pattern the ultimate answer to "what time is"? As [19] indicated with the multi-spectral recombined gravitation from the ontological realm of scientific methodology, the lack of evidence in null results sometimes can be the positive result depending on the epistemological perspective, and pragmatism in the humanities and social science does not necessarily diverge from the natural sciences. Does this imply there is some link between ontology and epistemology regardless of the dependence-independence dichotomies? With the humanitarianism of the Big Bang theory taken in mind, the pragmatism of primordial graviton background approach [20] is optimal for its interdisciplinary implications such as biochemistry, bioinformatics, and the medical sciences. The correspondence theory of truth in the intersubjectivity of natural scientists and the humanities & social scientists may arrive at vastly different conclusions; but the least can be expected in the information system of relativistic intersubjectivities is that, sociology of knowledge will play a more important role in the natural sciences than ever before with another mechanical loop of vector space.

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